



# OCC NewsLetter

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## Protecting-Advocating-Resolving

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The cliché, “The more things change, the more they stay the same” strikes home based on the recent changes within OCC. Pete Polen assumed the Deputy Chief Counsel role that he previously held during 2013. Ken Goetzke became the team lead of our Human Resources and Ethics Law Team (HRELT). His deep experience in these areas superbly positions him to lead the team. We were also saddened by the departure of Mona Williams, but are thrilled to welcome back Dacia Bruns who now serves on the HRELT. Dacia brings a wealth of personnel law experience that she gained in her Navy Office of General Counsel assignment following a prior stint on our LaRC Business Law Team. Additionally, I am honored to have been chosen to lead this superb legal team as the new LaRC Chief Counsel following Mike Madrid’s retirement.



All of these personnel changes capitalize on the expertise of our office and position OCC to continue to serve the Center as an integral part of the LaRC Team. OCC recently decided to adopt the following tagline: **Protecting-Advocating-Resolving**. These words signify how our OCC team collectively adds value to the Center in accomplishing its mission. For example, we **protect** LaRC’s intellectual property to advance the U.S. technology base and assist the Center in transferring technology and maximizing the Center’s return on investment. We also seek to **protect** the interest of NASA by advising individuals and organizations who seek our advice, across all of our practice areas, from straying outside legal, regulatory, or ethical bounds. We advocate for our clients to achieve results that satisfy our mission needs with innovative, creative and practical solutions. While legal work often entails dealing with conflict, we seek to **resolve** challenges in the best way possible for our Center by applying the facts and applicable laws to reach mutually satisfactory solutions. I am proud that the OCC is a proactive, approachable team that creatively applies the law to solve our client’s challenges. As our previous newsletters have indicated, the earlier you seek OCC’s involvement, the more likely we can offer helpful, actionable assistance—that is a constant in changing times.

W. Thomas “Tom” McMurry, Jr.  
LaRC Chief Counsel

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Robin Edwards, Michael Mark

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## WHO CAN PARK IN THOSE PARKING SPOTS RESERVED FOR “GREEN CARS”?

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LaRC has several parking lots with numerous reserved parking spaces delineated by a green placard. The placard says “Low Emitting and Fuel Efficient Parking Only.” What’s that really mean, and who can park there?

Those parking spaces are associated with a building, such as 2101 and 2102, which has gained sufficient environmental points to earn Leadership in Energy and Environmental Design (LEED) certification. LEED certification is the recognized standard for measuring building sustainability. The LEED green building rating system—developed and administered by the U.S. Green Building Council, a Washington D.C.-based, nonprofit coalition of building industry leaders—is designed to promote design and construction practices that, according to its website, “increase profitability while reducing the negative environmental impacts of buildings and improving occupant health and well-being.” The LEED rating system offers four certification levels for new construction—Certified, Silver, Gold and Platinum—that correspond to the number of credits accrued in five green design categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality.

Parking lots aren’t so good for the environment (reduced permeability, runoff, heat absorption, oil/fuel drips, etc.). But, by encouraging building inhabitants to use low emitting and fuel efficient cars for their commute the building owner can gain credits towards the building’s LEED rating. Reserved parking spaces are recognized as an inducement to sustainability.

Of course, having these special parking spaces means nothing if other than authorized vehicles park there. As stated earlier, only “low-emitting and fuel efficient” vehicles may legally park in the spaces. But who is to say which vehicles qualify? The American Council for an Energy Efficient Economy (ACEEE) defines which vehicles are “low-emitting and fuel efficient.” The

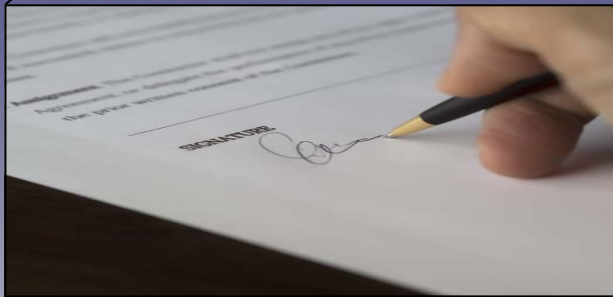
ACEEE has developed a database of all vehicles and ranks them by the associated “Green Score”. This score is determined by pollution during manufacturing, production and distribution of the required fuel type, exhaust emissions, fuel efficiency, hydrocarbons and much more. This information is reported through the U.S. Environmental Protection Agency and the California Air Resource Board. The list is updated each year. In order to be considered a low-emitting or fuel efficient vehicle for LEED purposes, the vehicle must have at least a score of 40. The scale ranges from 0 to 100, with a higher score implying a greener car with a lower environmental impact. So, in order to park in one of the green placarded parking spaces on LaRC, your vehicle must have a score of 40 or higher on the ACEEE list.

You might be surprised by which cars make the score. Not all hybrids meet the score. For example, the 2006 Toyota Highlander Hybrid only has a score of 38. As such, that car may not legally park in the reserved parking space even though it is a hybrid. Similarly, cars that are bio-fuel or flex fuel may not legally use the reserved parking spaces without having a score of at least 40. For example a 2008 flex-fuel Chevy Suburban, even though it could run on E85 ethanol (a cleaner, less polluting “green” fuel), only scored a 21 and is not entitled to a reserved “green” parking space. Conversely, a standard 2010 Honda Civic has a very respectable score of 57 and certainly may legally use the parking space. A 2013 Toyota Prius hybrid has a score of 58, and is clearly entitled to the space. A standard 2014 Audi A6 has a passing score of 42 and may use a “green” parking slot. For a 2014 Ford Taurus it depends on whether it is a model with a 2.0L engine (41 points) or a 3.5L engine (38 points).

Check your vehicle’s score at <http://www.greenercars.org>. If you are lowering your carbon footprint by driving a qualified vehicle, feel free to park in your reserved green parking spot!







## Small Business Innovation Research (SBIR) Contracts: What You Need to Know

You may have heard about SBIR contracts and their sister program the Small Business Technology Transfer (STTR) program. These are programs involving significant sums from the NASA research and development budgets and are a source of both innovations for the nation, as well as raising issues for the NASA Acquisition Integrity Program (AIP).

The SBIR and STTR programs are conducted under regulations issued by the Small Business Administration (SBA). The SBIR program has been in existence for more than 30 years, while the STTR program has existed for over 20 years. They are intended to stimulate U.S. technical innovation by using small businesses (SBIR program) or non-profit and educational research institutions (STTR). By law, three percent of NASA's R&D budget is dedicated to the SBIR program, while 0.45 percent of the R&D budget goes to the STTR program. On an annual basis, this amounts to over \$100 million. The Space Technology Mission Directorate administers the program for NASA with inputs from other Mission Directorates. NASA has an SBIR website with much more information. It can be found at <http://sbir.nasa.gov/>.

The SBIR program involves three different phases. Under Phase I, agencies may award contracts, grants or cooperative agreements of up to \$150,000, which NASA awards competitively under a broad agency solicitation. These contracts are intended to establish the feasibility of the proposed innovation. A competitive selection is then made from the Phase I contracts to award Phase II contracts of up to \$1 million to continue the development of the innovation. These phases are funded with the funds set aside for the SBIR program. A Phase III contract may be

awarded for products, production, services, R&D or any combination of these efforts using general (non-SBIR) funds. Phase III contracts are not dollar limited. The NASA Shared Services Center awards SBIR contracts and other agreements, but the technical oversight is conducted at the Centers. Thus, you may serve as a Contracting Officer Representative (COR) for SBIR contracts whose technical area falls within LaRC's portfolio.

While the SBIR and STTR programs have been a source of many innovations and have supported small businesses in developing new technologies and new markets, these contracts also have been a source of considerable fraudulent activities, including contracts for which LaRC has oversight. NASA currently has well over 40 SBIR contracts under review by the AIP office for possible fraudulent activity.

Among the types of issues we have seen include:

**False statements and certifications as to the eligibility of the contractor to be in the program** – we have seen instances where companies do not qualify to be in the program under the definitions found in the SBA regulations because they do not meet the size or ownership and control requirements for such entities.

**Shell corporations where the contractor lacks the personnel or facilities or both to perform the work.** In such cases, we have seen cases where the company uses “ghost” employees, creating false payroll records where payments are made but the individual is not working for the contractor or is not working on the particular contract, and the owner of the company pockets the money.

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**Research misconduct, including theft or misappropriation of intellectual property.**

There are cases ongoing where the contractor uses research of others (e.g., taking work described in a student's thesis and passing it off as the company's work), stealing others' work, or simply creating false research reports where no research actually was conducted.

**Duplicative research and contracts.** There have been cases where an SBIR contractor was awarded more than one contract for the same work. In these cases, the contractor submitted proposals to multiple agencies and received awards from multiple agencies. While it is acceptable to submit multiple proposals, offerors must inform agencies when they receive an award in order to avoid such duplications. NASA has had several cases where awardees pocketed many hundreds of thousands of dollars as a result of multiple awards.

We rely on personnel at the Centers who serve as technical points of contact for such contracts to serve as the eyes and ears of the Agency to avoid such situations. If you see things that cause you concern that the contractor is not performing as required by the contract, be sure to inform the Contracting Officer at NSSC. In addition, if you suspect that the contractor is not doing what it is required, contact the AIP representative in the Office of the Chief Counsel, Michael Mark, at 864-3221. You also may contact the IG, at 1-800-424-9183.

Remember, there is a lot of public funding at stake. While the vast majority of SBIR and STTR contractors are upright and perform as they proposed to, some do not. In such cases, the public and the Government are entitled to receive what they have paid for, and your vigilance will ensure that occurs.



The Office of Chief Counsel would like to express our thanks to three law students who have performed legal research and writing assignments for us over the fall semester. Mary Catherine Amerine and Jenna Tersteegen from William and Mary School of Law have visited us weekly. Geena M. Cesar, a student at the University of Florida Levin College of Law, has served as a virtual law student extern. They have our grateful appreciation, and we wish them well in their continued legal careers.

# HOW TO JAZZ UP YOUR PRESENTATION

## WITHOUT INFRINGING SOMEONE'S COPYRIGHT



You are in the middle of finalizing your presentation slides at the eve of the publisher's submission deadline when ... BAM. You come across a great cartoon on the internet that would really spice up your presentation (not that your presentation is not already amazing, but this cartoon would really put it over the top). You do a quick 'right click,' copy the image, paste it into your slides, add a quick source credit and save the final draft. There. Done. But wait. Is it ok to use that cartoon?

The answer? "It depends." The two words that makes all of us cringe. The problem is that using that cartoon may implicate copyright issues. Basically, copyright law prevents you from using, copying, and publishing another's work without their permission (with some limitations, of course). And contrary to popular belief, simply crediting the source of that work does not get you out of copyright infringement. This may seem ridiculous for just a little cartoon, but let's think about it in terms of your car. Your car is your property – you bought it. Now picture someone getting in your car and taking it for a drive without your permission. But before they drive off, they put a sign on your car that has your name on it (that way they are being clear that you own it – not them). Would that upset you? Why? They aren't trying to pretend like the car is theirs – they clearly put the sign on the car stating that it is your car – so what's the problem? The problem is that the car is your property, and you have the right to choose how your property is used. The same theory applies with the cartoon, but instead of real property, this is intellectual property. In your case, the cartoonist thought of a really great idea for a cartoon, spent hours drawing it up just right, and posted the cartoon on the internet to show the world. The key here is that the author posted the content so that everyone could see the cartoon – not so everyone could copy it and use it for whatever purpose they saw fit.

So getting back to our problem – how can you use that cartoon?

First, check to see if you have the right to use

it, which can arise a few different ways. One way is to read the terms and conditions on the website where you found the cartoon. That's right. Scroll down to the bottom of the page, click on the hyperlink that is usually there that says something like "Terms & Conditions" or "Terms of Use." Now read the terms. (If you were expecting this to be rocket science – I hate to disappoint you – but it really is this simple). Look at the permitted usage of the content (and get help from your legal department if you don't understand all the legalese), and all the strings that go along with it (e.g. indemnification, choice of law). If you are ok with those terms (and assuming they are legally acceptable for your employer), go ahead and use the content in accordance with the license. However, if you don't agree to all the strings that come attached, you may need to contact the copyright owner directly to get their permission to use the content without those strings attached. And as far as permission goes, make sure you get that permission in writing (e.g. email) to alleviate any confusion as to whether you had permission to use it in the first place.

Now, if you don't like the terms of use, and the content owner won't give you permission to use it, but you really, really need it for your presentation, another option is to determine whether you have a "fair use" right to use the content. The good news is that if your use is a 'fair use' of the content, it would mean that you don't infringe the copyright, so you are good to go. The bad news is that determining whether your use is a 'fair use' is not a simple determination. Basically, there are four factors to weigh – 1) purpose and character of the use, 2) nature of the work (e.g. nonfiction or fiction), 3) how much and how important was the portion of the work that you are using, and 4) the effect on the market (e.g. lost sales for the cartoonist). These factors can get a little complicated, so if you need to rely on a 'fair use' in order to use the content, you should speak with your legal folks before proceeding to ensure that you've got the 'thumbs-up.'

Happy publishing!





# Appropriate Use of Government Information Technology

All federal civil servant employees are held to a high standard of ethical conduct. Likewise, LaRC contractor employees are generally required to adhere to NASA and LaRC policies and procedures. The requirements of “ethical conduct” are broad, and encompass a wide range of laws and policy directives. In accordance with 5 CFR 2635.704(a), “An employee has a duty to protect and conserve Government property and shall not use such property, or allow its use, for other than authorized purposes.” This law is implemented agency-wide through NASA Policy Directive (NPD) 2540.1G, Personal Use of Government Office Equipment Including Information Technology. As Government employees and contractors, there is a duty to avoid the misuse of Government resources, including internet service, Government computers, and official time. Less abstractly, the policy directive provides rules about common workplace infractions and misuses of technology that can result in serious disciplinary measures and career ramifications.<sup>1</sup>

Recently, LaRC has experienced an increase in documented misuse of Government information technology

resources in four key areas. It is important to note that this conduct constitutes misuse of Government resources, regardless of whether the conduct took place during regular work hours, or during breaks or other personal time. The first of the four areas is the viewing of sexually explicit material using Government computers, handheld devices, and/or personally-owned devices using the government’s WiFi network. This behavior is clearly inappropriate for the workplace, and is also explicitly prohibited by NPD 2540.1G §1(d)(6), which bans viewing, storing, copying, or transmitting “sexually explicit or sexually oriented materials.”<sup>2</sup>

Second, any use of government-owned technology for commercial or business purposes is prohibited. Any activities that are related to outside employment, such as a personal business, or assisting others in their business endeavors, are not permitted. The use of Government resources for personal gain violates principles of ethical conduct and is a clear violation of NPD 2540.1G at § 1(d)(7).

A third potential violation is the accessing (or attempting to access) classified or other protected Government information that has been inappropriately released to the public. It is important to recognize that just because classified or protected information has been released to the public, does not mean it has been declassified and therefore, should not be accessed without proper authorization. The somewhat recent WikiLeaks breach has reemphasized this distinction.

Finally, employees are not permitted to engage in online gambling using Government resources. Although non-monetary office pools and brackets can be permissible in certain circumstances, for-pay internet gambling sites are forbidden, as gambling is a misuse of Government resources for private gain.

This article is not intended to be an exhaustive list of ethical and security violations, but rather, to highlight some areas of recent concern. It is important to note that NPD 2540.1G allows limited personal use of Government office equipment, as long as that use does not interfere with official business, violate existing laws, or involve more than minimal expense.<sup>3</sup> Always check with your supervisor to ensure any personal use of Government equipment is allowable and considered to be of minimal value. Employees are advised that telephone use and internet access are monitored, and activity is not private or anonymous.<sup>4</sup> Furthermore, if inappropriate activities are conducted on personal devices such as tablets, personal laptops, or cell phones that are connected to the Agency’s wireless network, those activities can also be monitored.

The consequences for misuse of Government equipment can include, depending on the specific violation, disciplinary actions, criminal penalties, and financial liability.<sup>5</sup> Possible disciplinary actions can include a written reprimand (which are retained in employees’ official personnel folders for up to two years), suspension, or removal from federal service. Apart from the important ethical and security reasons to avoid the behavior described above, the practical consequences can be devastating to a career. In addition to the financial consequences of a suspension or removal, discipline on employment records could have long-term effects on potential for advancement in federal positions or private sector employment.

In conclusion, the consequences of misuse of Government resources far outweigh the benefits. Employees should review policies and consult their supervisors prior to any personal use of Government resources.

## End Notes:

1. In addition to the ethical reasons for avoiding misuse of government equipment, misuse of information technology could potentially compromise the security of NASA resources. Requirements for proper use of technology resources can be found in NASA Procedural Requirement 2810.1A, Security of Information Technology, and Langley Procedural Requirement 2810.1 F-3, Security of Information Technology.
2. NPD 2540.1G §1(d)(6).
3. NPD 2540.1G § 1(b).
4. NPD 2540.1G § 1(e).
5. NPD 2540.1G § 1(f).

## RECENTLY ISSUED PATENTS

JUNE 15, 2015—OCTOBER 31, 2015



- Tian-Bing Jin H. Kang, NIA; Emilie J. Siochi, NASA LaRC; Lei Zuo State University of New York, Xiaoning Jiang, North Carolina State University. Patent Number, 9,048,759 issued June 2, 2015 for **Multistage Force Amplification of Piezoelectric Stacks**
- Sang H. Choi, NASA LaRC and Yeonjoon Park NIA. Patent Number 9,046,418 issued June 2, 2015, **Linear Fresnel Spectrometer Chip with Gradient Line Grating**
- David R. Schryer and Jeffrey D. Jordan, NASA LaRC; Ates Akyurtlu and Jale Akyurtlu, Hampton University. Patent Number 9,044,743, issued June 2, 2015 for **Catalyst for Decomposition of Nitrogen Oxides**
- Peter A. Parker and Raymond D. Rhew, NASA LaRC and Thomas H. Johnson and Drew Landman, Old Dominion University. Patent Number 9,052,250, issued June 9, 2015 for **Method of Calibrating a Force Balance**
- Max L. Blosser and Carl C. Poteet, NASA LaRC; Stan A. Bouslog, NASA Johnson Space Center. Patent Number 9,051,063, issued June 9, 2015 for **Space Vehicle Heat Shield Having Edgewise Strips of Ablative Material**
- Constantine Lukashin and Bruce A. Wielicki, NASA LaRC. Patent Number 9,052,236, issued June 9, 2015 for **Method for Ground-To-Satellite Laser Calibration System**
- Ya-Ping Sun and L. Monica Veca, Clemson University and John W. Connell, NASA LaRC. Patent Number 9,067,794, issued June 30, 2015 for **Highly Thermal Conductive Nanocomposites**
- Jin H. Kang, Cheol Park and Godfrey Sauti, NIA; Michael W. Smith, Sharon E. Lowther, and Robert G. Bryant, NASA LaRC; Kevin C. Jordan, Jefferson Sciences Associates. Patent Number 9,067,385, issued June 30, 2015 for **High Kinetic Energy Penetrator Shielding and High Wear Resistance Materials Fabricated with Boron Nitride Nanotubes (BNNTs) and BNNT Polymer Composites**
- Cheol Park, NIA; Dennis C. Working, Emilie J. Siochi and Joycelyn S. Harrison, NASA LaRC. Patent Number 9,074,066, issued July 7, 2015 for **Nanotubular Toughening Inclusions**
- Alan T. Pope and Chad L. Stephens, NASA LaRC; and Christopher A. Jones, LARSS. Patent Number 9,084,933, issued July 21, 2015 for **Method and System for Physiologically Modulating Action Role-playing Open World Video Games and Simulations Which Use Gesture and Body Image Sensing Control Input Devices**
- Leonard M. Weinstein, NASA LaRC. Patent Number 9,091,490, issued July 28, 2015 for **Open Loop Heat Pipe Radiator Having a Free-Piston for Wiping Condensed Working Fluid**
- Stephen J. Hales, NASA LaRC; Harold D. Claytor and Joel A. Alexa. Patent Number 9,090,950, issued July 28, 2015 for **Abnormal Grain Growth Suppression in Aluminum Alloys**
- Joel F. Campbell, Bing Lin and Amin R. Nehrir, NASA LaRC. Patent Number 9,097,646, issued August 4, 2015 for **Modulated Sine Waves for Differential Absorption Measurements Using a CW Laser System**
- Kent A. Watson, Yi Lin and Sayata Ghose, NIA; John W. Connell, NASA LaRC. Patent Number 9,120,677, issued September 1, 2015 for **Bulk Preparation of Holey Graphene via Controlled Catalytic Oxidation**
- Michael W. Smith, NASA LaRC and Cheol Park, NIA. Patent Number 9,133,032, issued September 15, 2015 for **Fine-Grained Targets for Laser Synthesis of Carbon Nanotubes**
- Mehdi R. Khorrami and Meelan M. Choudhari, NASA LaRC. Patent Number 9,132,909, issued September 15, 2015 for **Flap Edge Noise Reduction Fins**
- Godfrey Sauti and Tian Bing, NIA; Emilie J. Siochi and Stephen P. Wilkinson, NASA LaRC; Mary Ann Meador, NASA John H. Glenn Research Center at Lewis Field; Haiquan N. Guo, Ohio Aerospace Institute. Patent Number 9,137,883, issued September 15, 2015 for **Robust, Flexible and Lightweight Dielectric Barrier Discharge Actuators Using Nanofoams/Aerogels**
- Keith L. Gordon, Emilie J. Siochi, Brian W. Grimsley, Roberto J. Cano and Michael J. Czabaj, NASA LaRC. Patent Number 9,156,957, issued October 13, 2015 for **Puncture-Healing Thermoplastic Resin Carbon-Fiber Reinforced Composites**
- William R. Doggett, John T. Dorsey, George G. Ganoe, Thomas C. Jones and Cole K. Corbin, NASA LaRC; Bruce D. King, Lockheed Martin; Charles D. Mercer, Stinger Ghaffarian Technologies. Patent Number 9,168,659, issued October 27, 2015 for **Tension Stiffened and Tendon Actuated Manipulator**





# Humor

## Murphy's Law corollaries:

- ♦ **Beach's Law:** No two identical parts are alike.
- ♦ **Winger's Rule:** If it sits on your desk for 15 minutes, you've just become the expert.
- ♦ **Helen's Model for Predicting the Behavior of Machinery:** All machines are equipped with desperation detectors. The more desperate you are to meet any sort of deadline, the more intractable they become. Operators note: These detectors are not fooled by superficial acting, or the feigned appearance of calm.
- ♦ **O'Shee's Observation:** It always works better in the commercial.
- ♦ **Stump's Flu Shot Law:** If everyone else has a flu shot, you don't need one.

## Courtroom Humor:

The trial was about to start; the defendant, jury, and lawyers were all assembled. Just then, one of the jury members raised her hand, and the judge motioned her to speak.

"I'm afraid I cannot serve as a juror, Your Honor. One look at that man convinces me he is guilty." The judge sighed.

"That's the district attorney, ma'am."

# 2015 LARC CFC PUMPKIN CARVING CHAMPIONS!

